

Climate Change

The climate, the family farmer's most important business partner, is changing dramatically. And the effects of this change are already wreaking havoc on farms from Florida to Oklahoma to California. Extreme heat. Severe and long-lasting drought. Heavy rains. Massive flooding. Devastating wildfires. These are real problems that are ruining crops, livestock, and livelihoods of American farmers and ranchers. Without significant action, these disasters will continue to become more frequent and severe.

Projected Impacts on Family Farm Operations

In November 2018, the Trump administration released the Fourth National Climate Assessment, projecting devastating outcomes for farmers if no action is taken to prevent temperature increases:

- Heavy precipitation events are expected to occur two to five times as often as they currently do.
- Higher temperatures will result in reduced yields and added stress on meat, milk and egg production.
- Soil moisture is expected to decrease significantly across the southern Great Plains and the Southwest.
- Weeds, diseases and pests are expected to become more prevalent, and some pesticides and herbicides will lose their efficacy.

While innovation in American agriculture has driven productivity increases, the climate assessment states that the effects of climate change will likely begin to outpace adaptive strategies. Inaction on climate change will lead to a productivity decline of 25 percent for Midwest farmers by 2050.

Adaptation and Mitigation

Farmers and ranchers have shown an incredible ability to adapt to the effects of climatic changes and will be increasingly pressured to change what and how they farm. In all regions, farmers will likely have to shift the crops they choose to grow and will have to contend with new pests, diseases and weeds. At the same time, America's family farmers and ranchers have much to contribute to reducing greenhouse gas emissions. Practices like cover cropping, crop rotations and precision farming techniques can sequester carbon in the soil, and agricultural soils have the potential to absorb 3 to 8 billion metric tons of CO₂ yearly for the next 20 to 30 years.

Policy Recommendations

- ✓ **Promote adaptation** through appropriate research and technologies that secure family farm sustainability.
- ✓ **Engage farmers in efforts to mitigate climate change** through incentives for conservation practices and renewable energy production.